

Claims

1. Lock pin with pushbutton-operated axial locking, wherein the lock pin has a tubular body in whose interior an actuating plunger axially displaceable under spring loading is accommodated and which is configured as a pressure part which acts on two locking elements (2, 3; 32-35) pointing in opposite directions which are mounted in radially outwards directed recesses (5) in the body (4), **characterized in that** the locking elements (2, 3; 32-35) form a virtual, freely guided pivoting axis (12) in their connection zone (9, 10, 11, 20; 27, 29; 37).
2. Lock pin according to Claim 1, **characterized in that** the locking elements (2, 3; 32-35) are configured as rigid, inflexible bodies.
3. Lock pin according to Claims 1 and 2, **characterized in that** the pivoting axis (12) freely guided between the locking elements (2, 3) consists of a bearing shell (22) configured between the locking elements (2, 3), into which the pushrod (8) engages.
4. Lock pin according to Claims 1 and 2, **characterized in that** the freely guided pivoting axis (12) configured between the locking elements (32, 33) is configured in a bearing plunger (24) displaceably guided under spring loading, in which the two locking elements (32, 33) pivotably engage, each by a guide web (27).
5. Lock pin according to Claim 4, **characterized in that** the locking element (32, 33) consists of a block-shaped or rectangular body on the underside of which a guide web (27), approximately in the shape of a quadrant, is formed which engages pivotably in a guide slot (29) in the bearing plunger (24).
6. Lock pin according to Claim 4 or Claim 5, **characterized in that** the bearing plunger (24) has an axial longitudinal guide in the lock pin (1).
7. Lock pin according to any one of Claims 1 to 6, **characterized in that** the bearing-axes (37) of the locking elements (34, 35) are formed by approximately round-profile

pins formed on the inwards-facing ends of the locking elements (34, 35) and pivotably engaging in recesses in the bearing plunger (36) displaceable under spring loading.

8. Lock pin according to any one of Claims 1 to 6, **characterized in that** the bearing-axles (37) of the locking elements (34, 35) are formed by approximately round-profile pins formed parallel and spaced apart on the forward, free end of the pushrod (8) and engaging pivotably in slots (41) in the end faces of the locking elements (34, 35).

9. Lock pin according to Claim 8, **characterized in that** the pushrod (8) has on its forward, free end two parallel fork-extensions (38) bounding a recess in which the two bearing-axles (37) of the locking elements (34, 35) are pivotably held and in that the fork-extensions (38) engage in seats (42) in the bearing plunger (43) guided under spring loading, and are thereby guided.